
ABSTRACTS

TECHNICAL SCIENCES

Berezhnaya E. V., Kassov V. D., Turchanin M. A., Malygina S. V., Martynovskaya E. V. Modeling of heating of a powder tape shell // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The heat condition of a powder tape shell in different areas on free length of electrode is analyzed, the matters of unevenness of its melting are investigated. The mathematical model for calculating the heat of free length of powder tape with accounting of distribution of welding current on section of powder tape is offered. The mathematical model for heating reckoning of free electrode length is developed. Mathematical calculating dependences of shell temperature on free length suitable for practical use and allowing to define dependence of shell heat temperature from welding current capacity, sizes, coefficients of the filling, heat and physical characteristics of the powder tape are obtained.

Yanchuk S. V., Martynov S. V., Tagan L. V., Komirenko A. D. Simulation of the forging process of plates of rolled ingots // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The simulation using the finite element method schemes of blacksmith pulling slabs of rolling ingot macro shifts in the program QForm-2D is carried out. Simulation of the forging process of plates of rolling ingot PR54 (54 tons) showed that the prolongation of the macro shifts can receive local deformation in the central zone of 4,4, which is 44 % higher than in the classical forging technology (deformation 2,46). However, the disadvantages are identified in the scheme: bending of the workpiece, the need for changes, the availability of less-developed than the central part of the bottom and profitable areas, the likelihood of cracking in case of wrong choice of the gap between the strikers, possibility of forging manipulator raising relative to the rear axle. The above-mentioned disadvantages can be minimized or completely eliminated by the choice of forging.

Skryabin S. A., Gun'ko I. V., Bubnovskaja I. V. Study the structure and the broadening of billets of aluminum alloys during hot rolling // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The theoretical the effect study about heating temperature on the distribution rolling dies has been described the reduction degree, strain rate, temperature, billet cross-sectional deformation zone. To determine the calculated dependences of course it is used-cell technology program to simulate forging «QForm». Presented by the analysis of theoretical and experimental studies, which showed that the temperature of rolling dies significantly alters the behavior of the dependence of the broadening of the degree of compression, temperature and other factors. With increasing heating temperature bending dies, billet structure is aligned along the perimeter of the oval caliber.

Smolyakova V. V. The numerical mathematical modeling of accuracy of geometric characteristics of section bars during hot rolling in finishing work stands // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The mathematical model allowing to predict accuracy of resulting geometric characteristics of section bars as well as stability degree of energy-power parameters of rolling process along length of rolled billet taking into account a stochastic changes of initial process parameters and design features of finishing work stands section mills is represented. Design distributions of longitudinal crown of angle section in case of to rolling in stands with different rigidity modulus are given, statistical estimation of findings is produced. The model can be used for optimization of technological modes and constructive parameters of finishing work stands section rolling mills.

Grin A. G., Presnyakov V. A., Boiko I. A., Volkov S. M. Causes of failure of the bushings in pressing billets in hydraulic presses // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The data on the possible causes of failure of the bushings containers of hydraulic presses used to manufacture billets is presented. The main types of wear sleeves are set. The reasons that cause each type of wear are established. The ways of improving the wear resistance of working surfaces of the sleeves are shown. The requirements for the material extrusion tool are shown. It is shown that the main method of reducing the cost of manufacturing on wear resistant liners surfacing metal containing chromium, tungsten, nickel, and molybdenum. It is found that the most economical method of increasing wear resistance of working surfaces of bushings is arc welding self-shielding cored wire.

Zhukov N. B., Sus S. P. Research of efficiency of a modern hydromechanical method of distance of scale on the rolling mill hot hire // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The main thought of the article is researching results of efficiency of jets of hydromechanical descaling. It is established that the broadening of the fan jet is formed by a continuous stream of turbulent homogeneous mixture of

water droplets and air, the overwhelming bulk of which is the phase of the air. Theoretical dependence, to determine the operating parameters of the cooler, depending on the strength of a removable scale. Developed a more efficient way of removing scale in hot rolling mills. Substantiated that the mechanical destruction of dross is exposed in a narrow zone of impact of the jet in a very short time interval. Implementation method does not require costly and can not further increase the operating pressure to improve the quality of water surface being cleaned.

Maxshantsev V. G., Cherednichenko A. S. The analysis of the reasons for misalignment of the automated forging complex // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The reasons for the deviations of forgings from the nominal manufactured on the automated forging complex on the basis of hydraulic press with force of 30 MH are analysed. The major factors influencing the deviation of the sizes of forgings, namely: the heating temperature of a forging, design and condition of the forging machine, geometry of the working surface of dies, the accuracy of positioning forgings on the surface of the dies are considered. The mechanism of misalignment of a forging as the most significant error is studied. The control system of the geometrical sizes of forgings on the basis of optical sensor is developed. The impact on the accuracy of the control, deviation and geometrical parameters of a forging complex are taken into account.

Subbotin O. V., Kulik E. V. System of positioning of hydraulic sleeper of forging press // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The analysis of work of hydraulic forging press by nominal effort of 3000 t with two working cylinders is conducted. It is discovered that positioning of mobile sleeper is the main parameter of forging press work. Subsystem of visualization, checking, diagnostics and logging for organization of the access of the press operative personnel to performing operation provided by technology is designed. The flow diagram of control system of sleeper is developed. The System provides performance of all technological operation in automatic mode on principle of force change in working cylinder by means of regulation of entering liquids amount. Regulation of the position is realized according to data, got from position sensor for account of use of four extreme inverse cylinders. Mathematical model of press work is developed. Modeling of work of the system is conducted.

Lubenets S. V. Reasons of friction and wear in lifting-transporting machines // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The results of the analysis of force interaction of the cranes with the flyovers. The physical nature of the formation of lateral horizontal forces in the contact wheel-rail while rolling wheels of a crane on crane rails; the influence of the lubricant in the contact on the force of adhesion of wheel with the rail, the causes of periodic changes of horizontal lateral forces, the transfer of energy from the friction movement the contact of wheel-rail in, the physical nature of friction without lubrication (dry friction), rigid friction, boundary friction and the influence of friction and energy transfer processes on the life of crane structures are considered.

Roganov L. L., Roganov M. L., Abramova L. N. The Methods of the calculation seldom striking mechanism for excavator and mountain equipment // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

On the basis of constructive schemes of breakers of known foreign companies established in excavators, a more advanced schematic diagram of breaker is offered operating on the principle of the elastic energy of compressed fluid, which increases the energy of a single hit several times by reducing the stroke rate without changing the power of hydraulic excavators. A method for calculating the energy of a single blow to the study on models for the design concept hinged hammer is carried out. A pneumatic circuit breaker battery-based power cylinder pressure of 15 MPa with a volume of 150 liters of compressed gas (nitrogen), which reduces the mass of the working cylinder of the hammer is designed.

Krivsov V. C., Pavlenko V. N., Volkov I. V. Factors influencing the emergence of fatigue cracks in the blades of aircraft engines // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

Technological factors affecting the nucleation of fatigue cracks in the blades of aircraft engines at different stages of manufacturing process are analyzed. Established stages of nucleation and propagation of fatigue cracks. Studied the effect hand-polishing, ultrasonic and air blast hardening on the surface quality of blades. It is shown that to improve the fatigue resistance of compressor blades it is necessary to form a surface layer characteristics with the methods of surface and plastic deformation, which neutralize the adverse impact of technological stress concentrators.

Gitis V. B., Gitis T. P. Application of one-dimensional networks of Kohonen in an estimation of a level of professional development of machine workers // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

Possibility of perfection of procedure of estimation of level of professional development of machine-operators is examined due to application of facilities of artificial intelligence (to the one-dimensional network of Kohonen). The system of criteria of estimation, formed coming from that development of personnel is the process of permanent accumulation of knowledges and abilities, is offered, related to the vocational training and practical activity. The results

of approbation of offered approach are presented near the estimation of level of professional development of machine-operators of machine-building enterprise. The system neural network of estimation of personnel is instrumental in the decline of labor intensiveness and duration of this procedure, increase of its objectivity.

Kovalevsky S. V., Sokur S. V. Application of corona discharge in the industry // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The properties and characteristics of corona discharge are considered. The conditions for the occurrence of corona discharge and its causes are analyzed. The process of this discharge, which is explained by the ion avalanche is considered. Generalized classification of corona discharge, depending on various characteristics is given. The areas of application of corona discharge to form the working surfaces of parts of machines and mechanism are studied. The power characteristics which are necessary to implement a particular process are specified. As a result of the research it became clear that it's possible to use a corona discharge in ambient conditions to solve specific technological problems.

Kulbida O. O. Simulation of the assembly process in the automatic of assembly rotor with the use of affine transformations // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The analysis of kinematic schemes of the assembly, which suggests the possibility of assembling of different types of connection modules on the same hardware when using the isolated identical schemes in the analysis. This makes it possible to combine different products in the group, move on to a greater mass production using the automated equipment. The analytical expressions, describing the complex movements in of BTV and the rotor, which makes it possible to determine analytically the location and the parts of BTV in the coordinate system of the rotor at any time, and create a system of control over the assembly process and reduce the number of failures in the system are obtained.

Dzyura V. O., Diachun A. Y., Shevchuk O. S. The results of investigating of the internal screw grooves' battering // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

A technology for manufacture of internal helical spline grooves with small angles of inclination in a small-scale production with the help of special tooling has been worked out. The device designed for internal helical grooves fucking has been shown and cutting force is determined by fucking. We derive the regression equations to determine the strength of fucking using multifactorial experiment (definition of force chiseling depending on the width of the groove, the value of the tool feed and tool rake angle values). Graphical-analytical analysis of the results of experimental studies with the construction of response surfaces and two-dimensional sections has been performed.

Kalafatova L. P., Pavlovskaya O. A. Influence of the technological media on the efficiency of grinding of cutting mineralokeramiks inserts // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The composition of the surface-active technological media based on ethoxylated fatty alcohols and alkilmonosulfats supplemented with 1 % metasilicate of natrium, which has technological and operational features that ensure the efficiency of the grinding of the cutting blades mineralokeramiki in low corrosive influents on the equipment has been proposed. The technique of laboratory tests of the effectiveness of technological media in diamond grinding of cutting mineralokeramik's inserts was developed. Test results showed the possibility of stabilizing the tool wear over time and increasing of processing performance by 20–40 % compared with the media, which are used in manufacturing.

Klimenko G. P. Definition of quality and reliability of the multiblade instrument // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

A hierarchical system of properties that makes up the quality multiblade assorted tools has been developed. The wear resistance of cutters with plates, manufactured by various companies has been investigated. On the basis of reliability theory the mathematical relationships have been derived to determine a strategy for replacing faulty cutting teeth, depending on the desired level of the reliability. The mathematical model for calculating the reliability of assorted cutters has been got. The strategies of changing of the cutting tools have been substantiated. The application of the model makes it possible to reduce the cost of scarce tool materials. The results of the work introduced in the manufacture of machinery.

Kovalyova T. A. Automation of processing of augers on lathes machine with CNC // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The peculiarities of methods of processing of augers on milling machine tools are considered. The lacks of previous technologies of cutting of augers are shown. The new automation approach of cutting of augers on lathes with CNC is offered. The example of a model of a cutting center for the offered technology is illustrated. The calculation of reference points of movement of the tool is presented. The advantages of the offered technology of processing augers, which give economic effect, are shown. It is offered to optimize the technological process of processing augers according to technical and economic criteria: maximum productivity and minimum time of processing.

Mayboroda V. S., Minitskaya N. V. Complex method of increasing efficiency of hard-alloy cutting tools // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The analysis of methods of surface processing of cutting tools is presented and the most effective methods, from point of view of providing high operational requirements which are put forward by our industry to the modern cutting tools are determined. The advantages of the method of magnetic-abrasive processing in the conditions of the large gaps, especially when processing complex-profile products and the possibility of even mild effects on the processed surface, in the areas of thin edges are shown. Also the potential of this method not only when used before applying thin coating but also as a method of processing, which allows to correct the some defects of surfaces which arise after the application of coatings is shown.

Okhrimenko A. A. Features of kinematic geometry the back backed-off side of surface of worm gear hobs milling cutters with lines by rank // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The analysis of forming the side of the hob tooth grinding wheels with a conical surface. Equations are obtained contact relieved back side surface of the tooth cutters with conical surface relieving circle. The error change of tooth cutters, depending on the radius, at which it lies, and from the module cutter. The analysis is performed for the left and right side of the tooth. Studies have shown that the profile of the cutting edge on the left side has a convex shape, and on the right side convex. The absolute values of the error on the right side in the dominant error on the left side. The analysis of the error profile depending on the degree of regrinding mills. Ways of reducing the error profile by changing the angle of the circle conical surface profile.

Polupan I. I. Improvement of constructions of the collapsible cup-tip tools on recovery of outline of wheelpairs // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The functioning environment of the collapsible cup-tip tool is analyzed for treatment rigidity of wheel pairs, the improved construction of this instrument has been offered, allowing to increase the in the plate in the radial direction and strength of the insert by reducing stresses on the cutting edge. Researches of the tensely-deformed state of tool has been conducted. The dynamic model of the elastic system of the collapsible cup-tip tool is developed. Theoretical and experimental researches in the indicated construction are conducted. The fixing method has been offered, it will allow the efficiency rise of threatment of wheelpairs in way of cutter decrease plate breakage.

Ravskaya N. S., Kovaleva L. I., Rodin R. P. To determine the rate of the resulting motion of cutting at shaped cutter mill and turning polygonal shafts // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The some ambiguity in the definition of standard cutting the main motion has been shown, the resulting movement and feed movement, which refers to the kinematic patterns of cutting, including several rotational and translational motions, straightforward with great speed. We consider the problem in the determining the velocity of the resulting movements shaping cutting by milling and cutting turning as shaped multifaceted shafts. It is shown that the resulting movement in cutting shaping does not depend on the type of the cutting (radial or angular).

Flions O. V., Semeniv I. I., Oliynyk A. F. The analysis of cutting the tooth rubber cord and smooth conveyer belt by means of disk instruments blocks // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

Conveyor belts with fabric and steel cord, plastic, leather in engineering are widely used. The account and operation principle of the installation for cutting the conveyer belt into strips are proposed. The comparative analysis of the methods of cutting the tooth rubber cord and smooth conveyer belt with determining the power of cutting by means of blocks of cutting instruments on special installation is substantiated. The nature of changing the effort of cutting conveyer belts depending on regimes of cutting the geometrical parameters of cutting instruments and the parameters of the belt itself is determined. The practical recommendations on reducing the power of cutting the belts using the lubricate and cooling liquids are given.

Bulenkov E. A., Mikhaylov A. N. Influence of probabilities of interrotor transmission of wares on the capacity of multitop-level rotor line // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

Probability of faultless work of multitop-level rotor line for making of screws is investigated in this article. Probability of interrotor transmission of wares is described here. Probability of faultless work of line at the exposed values of probability of interrotor transmission of wares is defined here. The probability of failure of the line with the identified values of the probability multitop-level transmission products is investigated. It is rotined that on probability of faultless work of line most influence is rendered by probabilities of transmission of wares of the least diameters. An assessment of the feasibility of the proposed multitop-level rotary line is carried out.

Polschykov K. O. An analytical model of process of information message delivery is in the mobile radio network of the special setting // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

With the use of mathematical vehicle of probabilistic-temporal counts the analytical model of process of information message delivery in the mobile radio network of the special setting is developed. Expressions which reflect

dependence of mean time of information message delivery on mean time of his transmission taking into account the possible breaks of virtual connections are got, knots of network caused mobility and by the destructive actions of opponent. On the basis of results designs are well-proven that in the mobile radio network of the special setting duration the information messages passing must be less, than in telecommunication networks with the fixed topology.

Marilov N. G., Rebedak O. A. Optimization of the design of the magnetic solenoid DC valve-type // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

To optimize the design of the magnetic solenoid DC valve-type in order to ensure maximum traction at a given magnetizing force the program linking the thrust of an electromagnet with a core diameter and a working air gap of an electromagnet is written. Programming is done in the environment of Matlab. The proposed method of calculation of the magnetic solenoid enables the maximum extent possible to improve the dynamic characteristics of the electromagnet, and the curves to simplify the process of designing the device.

Obuhov A. N., Razzhivin A. V. Synthesis of a fuzzy-regulator of a temperature mode of fusion in electrothermal furnaces on the basis of a database of technological process // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The regulation problem of a temperature mode of fusion in electrothermal furnaces with use of the numerical knowledge base of technological process is solved is necessary. Rules of received data processing and delivery demanded operating influence are developed. The technique of synthesis a fuzzy-regulator, by a thermal mode of fusion which allows to unite the numerical information presented in the form of training data, with the linguistic information which is looking like rules base, created on the basis of numerical data has been considered. Formation of linguistic knowledge, the course of technological fusion process, is set by the directive schedule which can be presented in the form of indistinct rules.

Pankratov A. I. Protecting three-phase ac machine from winding damage // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

Classification of identification principles of winding fault of AC machines has given. Their common weaknesses are identified. We consider a new structure of the device protecting three-phase AC machines from winding damage, which increases the noise immunity at the adaptability expent to changes in unbalance currents and voltages in a three-phase network. The structure of neural net that recognizes all the faults types with interterm closure of winding AC machines has been given. The structure of the device protecting three-phase AC machine from faults in the windings, can improve the noise immunity at the expense of adaptability to changes in the asymmetry of currents and voltages in a three-phase network.

Fedorov M. M., Tkachenko A. O., Kutkovy I. P. Using the properties of the active three-points for the analysis and computation of branched electrical circuits // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

In the paper the basic properties of active three-points and the methods of determining the parameters of equivalent circuits are discussed. Design procedure of branched circuits using equivalent circuits of active three-point is proposed. Application of the technique is illustrated with examples. Approaches to calculation of electric circuits with a given topography - by finding an analytical equivalent EMF and resistance, as well as the unknown topography - using experimental load and short circuit are considered. The method is applicable in the analysis of circuits with unknown three-point topography as a result of input parameters.

Tsyganash V. E., Beloivanenko Y. S., Zverev V. M. Statement of objectives and substantiation of optimal control technological regime combined heat and power // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The main problems of solving the problem of optimal control of a powerful heat and power facility are stated and analyzed in the article. Object subsystems a single variable thanks to developed a general criterion for optimal control, tested in an industrial environment for less complex systems and offer ins the challenge of information optimization problem to select the preferred initiative is selected. The criterion function, which allows to separate signals on the frequency properties, which allows to coordinate better the dynamic features of the operator and the system that creates conditions for better integration of the dynamic properties of the control object is formulated.

Cherednyk J. N., Kvashnin V. O. The torque determination of the three-phase asynchronous squirrel cage motor // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

Torque calculation in microcontroller, taking place according to input parameter - electrical motor coordinates, which are measured with sensor (the phase stator voltages and the phase stator currents, angular velocity) and calculated with motor parameter (inductive and active stator and rotor resistances) are given. Offered method defines torque of the squirrel-cage asynchronous motor in the system of the natural coordinates A, B, C. Considered method allows to go into

direct control without coordinate transformations that leads to error reduction and increase of reliability. Considered method may be used in the case, when the torque sensor it is hard to mount, for instance, at modernizations of existing electric drive systems.

Shishkin A. V. Stand for research of electric drive dynamics at the model-based system engineering // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The problems of the model-based engineering of control system on an example of physical model of the electromechanic lathe carriage control system are considered in the article. The stages of the stand engineering for research of electromechanic dynamics at the model-based approach are considered. Researches and experiments are performed. They consist in determination of the electric motor real parameters and control object parameters, digital compensator design and research of possibility of programming code realization of regulator generation, development of s-shaped intensity setter, research of stability of combined control system work.

ECONOMIC SCIENCES

Akimova E. V., Chepiga A. V. Problems of foreign trade activities and export-import streams of Ukraine optimization direction // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The article is devoted to the problems of modern state and prospects of foreign economic activity of Ukraine. This article deals with indicators of the dynamics of exports and imports, trade balance and researching the causes of its negative value. The statistical data of distribution of import and export of goods, works and services between subjects of foreign trade activities are generalized and analysed. We investigate the ways to balance of export and import flows, optimization of their structures in terms of interests of all participants in international trade. We have learned and developed the proposals for improving state regulation of export and import operations.

Bogma S. D. The problems and prospects of capital consolidation in banking system of Ukraine // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The current situation of capital consolidation in banking system of Ukraine is reviewed. The volumes of consolidation processes in banking system of Ukraine for the last five years are analyzed; the consolidation of capitals in financial crisis is reviewed; the role of foreign capital in consolidation of banking sector of Ukraine is determined. The current situation with implementing the recommendations of the Basel Committee on Banking Supervision in Ukraine is reviewed, the influence of the recommendations on the increasing of general level of banking capitalization is observed. The main problems and prospects of consolidation processes in Ukrainian banks are determined. It is expected that further consolidation of capital in the banking sector in Ukraine will increase the financial stability of the banking system and the performance of individual banks and other nonbank financial institutions.

Gontarenko T. A. Efficiency improvement of labour motivation at enterprises of road construction // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The peculiarities of the formation of wage system at enterprises of road construction on the example of JV «Road construction department» AP «Zasyadko A. F. Zasyadko» are considered. The causes of low efficiency of personnel motivation at the enterprise are formulated. With a view to increase the effectiveness of the motivational mechanism of enterprise should be used as vertical differentiation of wages, depending on the complexity of the work, and horizontal – depending on its results. For employees whose work is of seasonal nature, the possibility of using a combination of the pay system is considered. The system of determination of tariff for different categories of workers, which has several advantages is proposed.

Gudima A. A., Eremkin E. A. Intellectual capital as a basis for innovation policy in the enterprises of machine-building industry // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

This article studies the various aspects of innovation management at enterprises. The aim of the research is defining peculiarities of innovation policy taking into consideration the enterprise's intellectual capital that contributes to additional income (revenue) and increasing competitiveness of products. The aspects of current legislation of Ukraine are presented and they state that intellectual capital of a company as the result of scientific and technical creativity can get the legal protection. The characteristics and specific approaches to the legal protection of intellectual capital are considered. The innovation activity features of machine-building plants in market conditions are given. Practical recommendations on innovative policies for machine-building enterprises are provided.

Gutnik E. V. Features of purchase-sale object in the market of the enterprises // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

In the article the features of purchase-sale object in the market of the enterprises which are not related to corporate pattern of ownership are allocated. As purchase-sale object of the market of the enterprises means of production in combination to the ground, manpower, technologies, information, patents and other objects which

have value, only entering interaction with each other are considered. Consideration of the market of the enterprises as separate type of the market which is distinct from the market of real estate, market of resources and capital market, by means of toolkit of a new direction in the economic theory – economic synergetic – is proved.

Domnina T. N. Problems and prospects of integration of international accounting standards and financial reporting system of Ukrainian accounting // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The nature and necessity of international standards are considered. A comparison of international accounting standards and national standards of Ukraine is given. General implementation issues associated with differences between Ukrainian and international standards of financial reporting standards are shown. It is shown that financial statements require continued harmonization, since it is a source of information about economic development of enterprise the account and the analysis of which occupy an important place to enter the number of stable and reliable partners in international cooperation. The single system will improve the quality of reporting and its usefulness for decision-making by investors, comparability and understandability in terms of increasing integration of financial markets.

Dubinskaja E. S. The conceptual scheme of maintenance of solvency of the machine-building enterprises within the limits of organizational-industrial management // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The emphasis is placed that the most menacing display of crisis development are problems with solvency as they can lead to claims from creditors to the enterprise - the debtor and to business excitation about bankruptcy. For the machine-building enterprises, especially for those that work not on the consumer market, and produce complex and expensive equipment for other enterprises, the operational cycle is constructed so that in it there is a long period of the raised threat of loss of solvency, the period of financial threat. For this reason in the work the basic directions of conceptual maintenance of solvency of the machine-building enterprises within organizational-industrial management and the model of an operational cycle of the large machine-building enterprises for maintenance of their sustainable development also are considered and formalized.

Dyachkova Y. N., Chernenko I. N. Activation of credit unions activity in the market of financial services // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The functions and the role of credit cooperation in the market of financial services have been disclosed. The indicators of credit unions activities in Ukraine for 2008–2010 (total assets, capital, and deposit accounts) have been analyzed. The main trends and problems of the domestic market of credit cooperation have been pointed out; the strategic directions of its development have been developed. On the basis of the standards elaborated by the State commission for regulation of financial services markets, the method of integral evaluation calculation of the credit union financial condition has been offered. These recommendations will enhance the movement of credit cooperatives, reducing the level of financial risk of credit unions and improve the efficiency of their functioning and strengthen the confidence of depositors, maintenance and enhancement of borrowed funds.

Zarevchatskaja T. V. The methodical approach to an estimation of small business efficiency within the limits of formation of state regulation mechanism // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

Domestic experience of research of problems of state regulation of small business is analysed. It is noticed that a prominent aspect of regulation of activity of enterprise sector is priority support of its innovative component. The methodical approach to an estimation of efficiency of small business within the limits in formation of the mechanism of state regulation is developed. The essence of the approach consists of estimation of long-term efficiency of innovative small enterprises by research of quality of management by monetary streams from investment, operational, and financial activity. Proposed application rate of rationality formation of cash flows with which it is possible to map the complex cash flows from the various activities and accounting for the minimum cash reserve.

Kasianova N. V. Informative providing of system management development of enterprise // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

In the article possibilities of integration of scientifically-methodical provisions of forming of cumulative strategy of development of enterprise are considered in an informative model in the format of IDEF0. A model aim is description of processes treatments of information and informative streams. They take place during forming of cumulative strategy of development of enterprise. Choice of model predefined by planning necessities. Users of the informative system in support making of administrative decisions by forming cumulative strategy of enterprise development are defined. The prospects of the practical use of the worked out informative model in the process of support preparation and acceptance of administrative decisions in industrial enterprises are pointed out.

Kolesov S. V. Innovative factors of competitiveness of industrial enterprises // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The role of innovative factors of competitiveness of industrial enterprises has been grounded in the article. Theoretical and applied aspects of innovative factors application for maintenance of competitiveness of the industrial enterprises of Ukraine in modern conditions of managing are systematized. The emphasis of Ukrainian enterprises made the price aspect of competitiveness is proved. A strategic blunder will not be able to provide high competitive position of businesses in the future. It is shown that the only effectively organized innovative processes are able to provide the competitiveness of industrial enterprise on the modern stage.

Lasukova A. S. The essence of the concept of «corporate social responsibility» and its implementation in Ukrainian banks // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The article observes the definition of «corporate social responsibility». The basic principles of the socially responsible activity are determined. Corporate social responsibility was an important component of both foreign banks and, more recently, domestic banks. The levels of management in social marketing in bank are pointed out in the article. The problem of understanding the meaning of «corporate social responsibility» is reviewed. Foreign and domestic scientists approaches of defining «corporate social responsibility» are analyzed. The necessary components of definition of «corporate social responsibility» are formed. The article explores what departments are involved in implementing the conception of «corporate social responsibility» in banks of Ukraine.

Mykhaylychenko N. N. Problems and prospects of small business in Ukraine // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The article analyzes the problems that hinder the development of small business in Ukraine, as an exogenous or endogenous nature. The research is devoted to a set of promising interventions development to address the problems of small business development. Based on analysis of endogenous and exogenous factors affecting small businesses, as well as on the principles of financial management and controlling as tools for improving the efficiency of small businesses are investigated. The author notes that the inclusion of only exogenous factors without sufficient attention to endogenous will not solve the problem of the small business sector in the domestic economy. Therefore measures aimed to supporting small businesses must include not only protection from the adverse effects of the general economic environment but also a set of methodological support small business management.

Pleskach V. P., Drobitko I. A., Shevchenko V. V. Commercialization of intellectual property rights. Audit of patent right subjects at the enterprise // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The analysis of the theoretical and practical aspects of commercialization of the rights for the results of intellectual activities has been performed. The realization forms of patent right subjects on the market in the form of a product and by means of the property rights realization have been considered. The dynamics of registration by the State Department of intellectual property of the documents of title and agreements on the transfer of the rights to invention and utility models has been given. The attention has been drawn to the increase in the efficiency of commercialization of enterprise developments with the review of the typical problems. The indices of patenting and commercialization of the inventions and utility models of the enterprise have been shown on the example of NKMZ. The algorithm of auditing the patent right subjects at the enterprise for the purpose of creating a background for the property rights commercialization has been specified.

Rozumnaya N. V. Analysis of methods for assessing the investment attractiveness of enterprises in the integration process // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

There have been given the results of the analysis of the foreign and domestic experience on the issue of the economic evaluation of investment attractiveness of the enterprises in the process of mergers or acquisitions of enterprises. Existing in the world practice methods of evaluating the effectiveness of integration processes, identified their strengths and weaknesses have been reviewed. Recommendations on the application of the considered methods in the process of integration of the enterprises, which are functioning in modern conditions of development of economy of Ukraine have been developed. Further developments on this subject have been defined. Possible assessment synergy effects of the integration of the enterprises have been discussed.

Serdyuk E. N., Zarevchatskaja T. V. The improvement of the system of accounting and the efficiency of fixed assets in enterprises of extractive industry // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

Management of capital stock of coal mines is an important aspect of effective management of extractive industry. The main trends in the development of coal mines in the current economic conditions, and the main features of management of capital in the enterprises of the region have been analyzed. The proposals for improving the efficiency of plant and equipment at coal mines, the essence of which is to improve the return on assets at the expense of unnecessary disposal of fixed assets and commissioning of usable, but nonperforming assets have been developed. Formed a display option in the accounting operations of sale of fixed assets has been formed.

Sidorenko I. V., Sopilnik A. A. Accounting policy of enterprises in Ukraine: theory and practice // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The article is dedicated to the theoretical and practical issues of accounting policy development at the enterprises by economic entities of Ukraine. The nature, purpose and main stages of the accounting policy of an enterprise are investigated. The essence of concept «accounting policy of an enterprise» has been clarified. Necessity of accounting policy in accordance with the modern business environment are proved. Separate elements of resources of the accounting policy of an enterprise are defined. The recommendations for the development of the efficiency of the functioning of accounting policy are proposed. Scientific-theoretical preconditions of the further reforming of accounting and formation of an accounting policy are opened.

Simakov K. I., Nikita A. J. The effectiveness of the banking system during the global financial crisis // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The banking system as a part of the financial sector, is designed to accelerate the transformation of society in general and business development in particular, since a significant impact on the Ukrainian banking environment is obvious. The functioning of the banking system in financial crisis is characterized by increasing liquidity risk, foreign exchange, credit and other risks due to a significant outflow of clients; low-income from repayment of loans; limited access to credit to the economy and raising funds in the interbank and foreign markets, the liquidity of banks is largely due to the refinancing of loans obtained from the National Bank of Ukraine.

Simonenko T. G. Performance management compensation packages // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

The necessity of using methods of the tangible and intangible incentives for success of any organization is obvious. The article reviews the problem of constructing and implementing a compensation package for the production of a modern enterprise. The questions to the correct construction of the compensation package before you modify or optimize the compensation policy of the company have been observed. Results of a study have been shown, you can see the benefits increasingly used in companies. The structure of benefits, the most popular, and rewards often used by companies have been presented in details. Construction of proper compensation package to enhance the activities of any organization or industrial enterprise has been offered.

Telinova A. V. Budgeting as a system element of financial management of the domestic enterprise // Scientific Herald of the DSEA. – 2011. – № 1 (7E).

Main notions budgeting in functioning (working) the domestic researchers in given area have been presented. Main approaches to practical person of the planning and budgeting, possibility of their using domestic enterprise have been studied and analyzed. Budgeting on the base of increasing of coordination and consensus with subsystem and function of financial management assists the improvement of results in aim achievements, raises the adaptability of the enterprise to external and internal condition, controllability of the enterprise, reduces the possibility of mistakes in taking the management decisions, provides intercoupling different aspect financial management.